Dictionaries of African Sign Languages: An Overview

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This article presents an overview of dictionaries of African sign languages (African SLs) that have been published to date. I begin with an introduction to the larger field of sign language lexicography and discuss some of the obstacles that authors of sign language dictionaries face in general, as well as obstacles related to sign language dictionary making in Africa in particular.

Next I present an introduction to the dictionaries of African SLs, including who produced them, why and for whom they were produced, and how data were collected. In the following sections, the structure and content of all dictionaries of African SLs are described and analyzed in detail. I describe the format and size of the dictionaries and the number of entries they comprise. I also look at whether the authors have included introductions, a user guide, information on the structure of sign languages, and indices. The section on the microstructure of the dictionaries discusses the presentation and translation of signs and whether any information on sign production and variation is provided. I also compare the language(s) the compilers decided to use.

While the dictionaries of African SLs are presented in chronological order within the article, they are listed in alphabetical order in the reference section.

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Reasons for Making a Dictionary

According to David Crystal, a dictionary is "a reference book that lists the words of one or more languages, usually in alphabetical order, along with information about their spelling, pronunciation, grammatical status, meaning, history and use" (1997, 108). However, dictionaries not only present the words of a language and their meanings but also have sociolinguistic functions. Even though most dictionaries claim to be descriptive and not prescriptive, users often regard them as authoritative and standardized.

The most important reasons for making a dictionary of a language include the following:

- documentation of a language, which may serve different purposes, including these:
  - people's need to obtain more information about a language
  - the need to have a resource and research tool
  - the need to protect and preserve a language that is under threat from (an)other dominant language(s)
- recognition of a language, legitimating a language, or confirming the status of a language
- standardization: according to Johnston (2003), this is the prime motivation for making a dictionary.

In many countries, the sign language dictionaries that have been published in recent years are often the first dictionaries of the national sign language (see Carmel 1992) and therefore always have some function of setting a standard—whether or not this was intended. However, the most important reason for making sign language dictionaries has been to show that sign languages are bona fide languages like any spoken language. This aspect of demonstrating that sign languages are "fully developed," "real" languages and not gestures or pantomime has been particularly important for deaf people. In fact, if one looks at the introductions to sign language dictionaries, authors always seem to feel the need to emphasize that the language they are documenting is indeed a language (see the section on reasons and aims).

By putting the signs of a language into a book (the size of this book is also important), the language thereby seems to become real; this can help to strengthen the deaf community and its culture:

> The sociolinguistic functions of dictionaries—to provide standard models and to reinforce and confirm the status of languages—will probably continue to guide the production of dictionaries. And clearly for emerging deaf communities and sign languages, both of these functions are central to the continuing empowerment of deaf people all over the world. (Lucas 2003, 339)

In Africa, showing that sign languages are fully developed languages is even more important. In many African countries, foreign sign languages have been imported from the United States or Europe and are often regarded by deaf people as "real" sign languages as opposed to their own indigenous "local" sign languages (Schmaling 2001, 180; for an overview of foreign sign languages in Africa see Schmaling 2001, 181). The latter are often regarded as merely gestures or unrefined sign systems. This may be a result of the fact that international sign language publications available to deaf persons in Africa are very ASL-centric.

Tola Odusanya's[1] comment on Hausa Sign Language is probably the most explicit statement in this respect that has been published about any sign language in Africa:

> In present-day northern states of Nigeria, there is a form of *unsophisticated and unrefined sign language* being utilized. These signs, though often combined with mimed demonstrations, are yet distinct from complete use of mime. These signs are mostly Arabic- and Hausa-language based. Thus, Muslims in the northern part of Nigeria are often able to communicate with one another in sign language both between and within the states. However, it has been observed that Christians quite unversed in Arabic words are sometimes unable to keep up with other users of these forms of sign language where fluency in either Arabic or Hausa and the knowledge of Northern Nigeria cultural disposition are quite important. These signs and language belies go contrary to pure English grammatical syntax which is the lingua franca of the Nigerian Nation. (2000, 4; my emphasis)

Note that Odusanya talks about Hausa Sign Language as a "language" and acknowledges the fact that a language cannot be used and understood without (some) cultural knowledge. That this language does

not conform to the rules of spoken Nigerian English syntax is not surprising to a sign language linguist.

Making Sign Language Dictionaries: General Problems and Africa-Specific Problems

The first sign language dictionary was published in France at the end of the eighteenth century (by the Abbé de l'Épée; see Fischer 1996). Since the 1960s the number of sign language dictionaries in the United States and Europe, but also in some non-Western countries, has been constantly increasing.[2] In 1965 Stokoe and his colleagues published the first sign language dictionary on linguistic principles (Stokoe, Casterline, and Croneberg 1965). The first sign language dictionary in Africa was published in Kenya in 1980 (Nieder-Heitmann 1980).

In recent years, many sign language linguists have been involved in the compilation and publication of sign language dictionaries in various parts of the world. Nevertheless, there are no standard reference works on the making of sign language dictionaries but only single publications that deal with the problems of specific dictionary projects.[3]

The creation of a sign language dictionary involves various difficulties. Some are obstacles that sign language lexicographers face in general, while others are specific to the African context. Some of these are discussed later. Other relevant issues and questions are not dealt with in this article (e.g., How are the data collected? Who are the informants, and how are they chosen? Who is involved in the process of data collection and elicitation? Who decides which items to include?). All of these are important theoretical questions, but they cannot be discussed in depth here as we have little information (and often none at all) on the processes of the compilation and publication of the dictionaries of African SLs; exceptions are the dictionaries of the sign languages in Mali, Namibia (1991), and South Africa. The information that is available is presented later.

I have also excluded some important linguistic questions that have been discussed extensively in the literature by various authors who write on sign language lexicography, including: What are lexical signs, and what does one do with nonlexical forms? What is a "lexeme" in

sign language? According to Johnston and Schembri (1999, 126), a lexeme is "a sign that has a clearly identifiable citation form which is regularly and strongly associated with a meaning." But then, what exactly is the citation form of a sign? This is particularly difficult in so-called directional or locatable signs. How is inflection treated in a dictionary? And how should iconicity be dealt with in a dictionary? These questions are beyond the scope of this article.

Writing Sign Languages

> [T]here is no written form of any signed language, nor is any likely to be successfully introduced into any signing community.
>
> Johnston 2003, 437

For lexicographers, the lack of a writing system or a (widely used) orthography for sign languages has been a major obstacle because they did not know how to write down the signs. Sign languages share this lack of a written form with many spoken languages. Whereas in the countries where most sign language dictionaries were published between the 1970s and the 1990s, the spoken languages usually have a written form; in Africa, however, the absence of a written form of a language is not uncommon: Many African languages have never been written down and have no orthography. For writing them down, another writing system had to be used or an orthography had to be invented. This happened for many face-to-face languages in Africa.

One of the major difficulties in developing a writing system for sign languages is the high degree of variation and the lack of a widely accepted and recognized variant within a signing community. According to Johnston (2003), it is unlikely that any attempt to devise a writing system for sign languages will produce a viable communication mode because literacy in signed languages seems to have no functional linguistic value. Deaf people who are literate are also always bilingual. Various notation or transcription systems exist (e.g., Stokoe notation, HamNoSys), however, most of which have been developed and are used for linguistic research purposes (e.g., for comparing and analyzing data).[4] They are not intended for use—and they are not used—by deaf people for writing down their own language.

Nevertheless, a writing system intended for daily use within signing communities was developed by Valerie Sutton in the 1970s and has

since been further developed, expanded, and improved both for daily use by deaf people and for academic or research purposes (see Sutton 1981, and www.signwriting.org). In several countries SignWriting is now used by signing communities and in schools for deaf children for writing the national sign languages.[5]

As a result of the lack of a commonly agreed-upon writing system, no monolingual sign language dictionary has been produced to date as far as I know. Sign language dictionaries are usually (at least) bilingual and unidirectional; that is, they present pictures of the signs and use the written form of the (majority) spoken language for the translation (or glossing) of the sign and perhaps for explanations of sign performance ("pronunciation"), etymology and variation, definitions of meaning, and example sentences. However, many dictionaries comprise only sign pictures (drawings or photographs) with their gloss translations but with very little other information: "Whatever the reason, there are very few sign language dictionaries which provide the range of information we typically expect in a spoken language dictionary" (Brien and Brennan 1995, 315).

The lack of a writing system and of a sign language alphabet also raises the question of how to arrange the signs in a dictionary. Several possibilities of sign order exist. In many of the printed-media sign language dictionaries, signs are listed according to the key glosses or translations of a sign (i.e., they are sorted according to the alphabet of the glossing language). To many lexicographers, this has seemed the easiest way to arrange signs, often for reasons of simplicity and familiarity (see Van Cleve 2003, 494). However, this alphabetical order poses several problems: First, one has to decide which language should be used as the second language in the dictionary. Second, even though alphabetical order may be the best way to access the dictionary for hearing users who are acquainted with this, it is not really useful for members of the deaf community who are not confident of their written-language skills. Alphabetically arranged sign language dictionaries clearly do not have deaf people in mind as the target user group. While many deaf people have a rather low literacy level (estimated at primary-school grade 4 level), in Africa, a significant number of deaf people are not literate at all.[6] The problem of literacy becomes even more evident if (longer) explanations or definitions are used in

a dictionary: Who has sufficient competence in the spoken language to read the texts? (And who can compose these texts?)

Another possibility is to arrange signs according to one of the parameters that make up a sign. This is the method Stokoe and his colleagues chose for their ASL dictionary in 1965. Other authors have also decided to use sign language linguistic criteria for arranging signs in their dictionaries (e.g., Wrigley et al. [1990] for Thai SL; Morgan et al. [1991] for Namibian SL).

In the dictionaries that use sign language linguistic criteria, the authors have usually opted to arrange signs according to handshapes or handshape groups. In the Thai SL dictionary, signs are arranged according to so-called handshape roots. However, handshape order may also be problematic, as one has to decide how to arrange handshapes.

Finally, signs can be arranged in thematic order: This means that the entries are arranged according to topics. This order seems particularly useful if aimed at users who are not acquainted with using dictionaries and with alphabetical order, and many deaf associations in Africa have chosen this approach. It is useful for students in literacy classes, people who are not fully competent in the written language, but also for sign language learners.

The order of signs becomes less important in electronic dictionaries as one can look for and retrieve signs using different search criteria. In the United States, Australia, and Europe, multimedia interactive dictionaries with digital videos have been published in various electronic formats (see the section on sign illustrations and technical equipment).

Multilingualism

One of the Africa-specific obstacles in making a sign language dictionary is Africa's multilingual context. Most sign language dictionaries have been produced in so-called monolingual European countries and in the United States (even though, of course, none of these countries is truly monolingual). As the issue of multilingualism is of little importance for lexicographers working in these countries, it has not been discussed in the literature.

However, this question is particularly relevant in African countries with 30, 100, or even 450 spoken languages (e.g., Nigeria): Which of these languages should be used as the second language in the diction-

ary? In many African countries, the "easiest" solution seemed to be to choose the former colonial language in order not to have to decide which of the African languages to choose.

Related to the multilingual situation is another question: In a country with a diversity of spoken languages, are there as many sign languages? In Western countries, it is always assumed that a country has *one* sign language with a number of different dialects or regional variants. However, in Namibia, the authors of the 1991 dictionary state that there may be "many sign languages in Namibia or only one" (ix) and that there are "either other varieties of NSL or other sign languages in Namibia" (xi). In Nigeria, the sign language of the northern region of the country, Hausa Sign Language, has been analyzed and described in detail. However, whether this is one regional variant of one Nigerian SL or one of several sign languages in Nigeria, only extensive research can answer (Schmaling 2000, 47). South Africa, for example, seems to have at least eleven regional variants of South African Sign Language (SASL) related to different educational settings.[7]

Whether one country has different sign languages or several variations of one language can be answered only if large-scale sign language research is undertaken. This has not taken place in any African country to date except in South Africa.

Sociolinguistic Variation

Each sign language—whether it is national or local—has different variants. Social factors that lead to sociolinguistic variation include age, gender, region, ethnicity, religion, education, and socioeconomic status, as well as hearing status and age of onset of deafness. Variation can occur on different levels: on the phonetic/phonological level (e.g., the use of different handshapes or movements in a sign), on the lexical/semantic level (different signers' use of different signs for the same meaning), and on the grammatical/syntactic level.

Dictionary compilers always have to make choices; they have to decide which sign (and which variation) to include in a dictionary. By doing so, they therefore also define some kind of standard. In spoken languages with an orthography, the written form is often regarded as the "standard" form of the language. This standardized form is usually

associated with power, prestige, education, and literacy: Other variants are considered incorrect, wrong, illiterate, or substandard and are stigmatized or even discriminated against (Milroy and Milroy 1999; Landau 2001; Johnston 2003).[8]

Sign languages often exhibit significant variation, and most signing communities have no highly valued, widely recognized, and preferred variety (Lucas 1989). In those that do, the preferred variety is usually associated with forms of signed language that are heavily influenced by the spoken language in its written form (Johnston 2003, 438). The main challenge for lexicographers is what to do with these variants. In the ideal case, all variations should be collected and also presented in a dictionary because choosing one variant brings about the devaluation of other sign varieties.[9] However, presenting all of the variations is usually unfeasible. It is, however, important to show some variation and to collect signs from different regions with people of various ages and diverse social and educational backgrounds. If signs from only one region or one particular group are presented (e.g., "educated" deaf people or "young" deaf people), the signs may not be accepted or may be regarded as wrong, which may lead to the rejection of the dictionary as a whole.

Sign Illustrations and Technical Equipment

For the user of a dictionary to understand a sign (and to be able to reproduce it), it is important to know what the hands, body/head, face, and mouth are doing as all of these contribute to the meaning of a sign (i.e., one should be able to clearly see the different manual and nonmanual parameters that make up a sign).

For illustrations of signs in printed-media dictionaries, the authors usually include either photographs or line drawings. Both lack clarity and are often ambiguous, especially with regard to the dynamic features of a sign (e.g., movements of the hands, the body and head, and the mouth). Other nonmanual features are also often not clearly visible. For movements, dictionary designers sometimes use arrows, but it is often difficult to understand what an arrow means in a two-dimensional picture. Generally, it is a problem of using a two-dimensional medium (printed books) for a language that is performed in three-dimensional space.[10]

Ideally, one would use video clips for this purpose: Here, the user can see exactly how a sign is performed. In various European countries, the United States, and Australia, multimedia interactive dictionaries with digital videos are being developed, and many have been published in various formats (CD-ROMs, DVDs, online).[11] In Africa, many signing communities lack the necessary technical equipment to produce these types of dictionaries. However, even if the technical equipment were available for the *production* of a dictionary, who could *use* such an electronic dictionary (i.e., who has the technical equipment)? In fact, many people have no access to a computer, let alone to the Internet.

For sign drawings, a good artist is needed. If photos are used, it is important to show people of different backgrounds (age, gender, region, ethnicity). However, photographs are much more expensive, and the production costs for the dictionary will also be much higher than with line drawings. In addition, printed photographs may not be as clear as drawings.

The financial aspect is particularly relevant in Africa: Most deaf associations have very limited funds; they also do not have the personnel or the technical equipment to produce high-tech dictionaries on a large scale.

Dictionaries of African Sign Languages

Many of the publications presented, compared, and discussed in this article are called "dictionaries" by their authors even though they are not dictionaries according to a strict lexicographical definition (see earlier). Rather, many are collections of individual signs of a language, often elicited via (one of) the majority spoken languages of the hearing community. In some African countries, the authors of these publications have intentionally not called them dictionaries: In The Gambia, they are called "sign language books" because they were not conceptualized as dictionaries but as literacy materials even though they may serve as dictionaries in specific contexts or for certain individuals. I do not wish to judge the attempts of the authors and publishers (who are often deaf associations or deaf individuals; in a few cases they are hearing people involved with the deaf community), nor do I want to classify these books into different categories

by calling some dictionaries and others not; I have therefore decided to use the term "dictionary" for all of them.

Included in table 1 are all of the dictionaries of African SLs that have been published to date that I know of and that I possess. It is possible that other books have been published; however, as most of these publications are not widely circulated, access to them is rather difficult. The structure and content of all printed-media dictionaries are discussed and illustrated in the following sections.

Included in table 1 but excluded from the description and discussion in the following sections, tables, and graphs are four publications: (a) the first dictionary from South Africa that documents a systemized language system: The book depicts signs that should be used as a component of a combined communication (i.e., a form of Signed [Southern African] English [Nieder-Heitmann 1980]); (b) a Ugandan sign vocabulary collection that comprises approximately forty entries and was clearly not designed as a sign language dictionary (Cassingham n.d. [after 1994]); (c) a collection of Hausa Sign Language signs on family (Schmaling and Bala Hausawa 2011): This pamphlet with about thirty-five entries, each with a translation into Hausa; and (d) the dictionary of Zambian Sign Language (Bwalya 1985), of which I have not been able to obtain a copy.[12] Not included in table 1 is a dictionary of Amharic Sign Language, commonly known as "HA Meshaf,"[13] on which the Ethiopian SL dictionary (2008) is based, as well as a collection of twenty-nine signs published by the Eritrean National Association of the Deaf (n.d.).

Apart from these printed-media dictionaries, two other publications appeared in 2004: a video with signed vocabulary in Namibia and an interactive CD-ROM dictionary in Kenya. These are discussed separately in the section on dictionaries of African SLs on video and CD-ROM.

Authors, Compilers, Publishers

Many sign language dictionaries in Africa have been compiled and published by the national deaf association of a country or by people working for or with the deaf association (e.g., in Uganda, Tanzania, Ghana, and Ethiopia). In Kenya, the dictionary project is an ongoing joint project involving the Kenyan National Association of the Deaf (KNAD) and Nairobi University: In the late 1980s, the Kenyan Sign

Table 1. Dictionaries of African SLs in Chronological Order[1]

Year	Country	Title	Authors, Editors, Compilers
1980	South Africa	Talking to the deaf: Praat met die dowes. A visual manual of standardized signs for the Deaf in South Africa: 'n visuele handboek met gestandaardiseerde gebare vir Dowes in Suid-Afrika.	Nieder-Heitmann
1985	Zambia	Zambian Sign Language	Bwalya
1988	Kenya	A basic Kenyan sign dictionary: English/Kiswahili	Rothenborg-Jensen and Yego
1990	Dem. Rep. Congo (Zaire)	Communiquons avec les sourds: Dictionnaire bilingue élémentaire: Langue des signes/Français	Cornett
1991 (rev. 2001)	Kenya	Kenyan Sign Language dictionary	Akach (Mweri)
1991	Namibia	Namibian Sign Language to English and Oshiwambo	Morgan et al.
1991	Lesotho	Puo ea sesotho ka matsaho	James
1992–1994	South Africa	Dictionary of Southern African signs for communicating with the deaf. 5 volumes[2]	Penn et al.
1993	Tanzania	Kamusi ya lugha ya alama Tanzania / The Tanzania Sign Language dictionary: Kiswahili/Kiingereza – lugha ya alama / Swahili/English – sign language	Chama cha Viziwi Tanzania
n.d. [after 1994]	Uganda	Sign Language basic vocabulary: Information for teachers and parents	Cassingham
1998	Kenya	Kenyan Sign Language vocabulary pamphlets: Time/animals/family	KSLRP
1998 (rev. 1999)	Uganda	Manual of Ugandan signs	UNAD
1999	Mali	Lexique des signes untilisés par les sourds du Mali: Mali mEnnikEbaliw ka taamasiyEnw daNEgafe	Pinsonneault
2000	Nigeria	Basic sign language	Odusanya
2001–2005	Gambia	Gambian Sign Language: Books 1–4	GADHOH
n.d. [ca.2001]	Ghana	Ghanaian Sign Language	GNAD
2005	Namibia	Namibian Sign Language: A book for beginners	Madison
2008	Ethiopia	Ethiopian Sign Language dictionary[3]	ENAD
2011	Nigeria	Maganar hannu: Harshen bebaye na kasar Hausa. Littafi na farko: Iyali/Hausa sign language book: Family.	Schmaling and Bala Hausawa

1. See the reference section for full bibliographical references (in alphabetical order).
2. The authors initially planned to produce six volumes; however, volume 6 was never published.
3. The title of the dictionary is in Amharic, the English title is the translation of the Amharic title.

Language Research Project (KSLRP) was set up with a research and project team of deaf and hearing people; the project is located at Nairobi University.

In some countries, the dictionary compilation and publication were part of projects that were financially supported from outside (e.g., in The Gambia, Uganda, Kenya [1991], Mali, and Ghana). Only a few dictionaries, like the Nigerian SL dictionary, were compiled by deaf individuals. In many countries, the dictionary compilation is not based on linguistic research, but consultants with a linguistic background are often involved to assist with some of the linguistic aspects of dictionary making (e.g., in Mali and The Gambia).

Two dictionaries of African SLs differ quite significantly from the other dictionaries, namely the Namibian SL dictionary (1991) and the dictionary of SASL. The former differs not only because it is arranged according to sign language linguistic principles (see later) but also because it was compiled outside Namibia at Gallaudet University. Six deaf black Namibians, native (exile) signers, and two hearing Namibians who spent fifteen months at Gallaudet University compiled the dictionary with the assistance of linguists working at the university.

The SASL dictionary project cannot be compared to any of the other dictionary projects. This project, which was financially supported by the Human Sciences Research Council and the South African Council for the deaf, involved the work of a large group of both deaf and hearing people that included native sign language users and linguists who worked on the compilation for several years.

Reasons and Aims

It is important to know why and for whom a dictionary is produced. The size of the dictionary and the way signs are arranged in it depend on the target group and its reasons for using the dictionary.

In many of the dictionaries of African SLs, the authors state that their aim is to show that their language is a "real" language that is used by deaf people in the same way that spoken languages are used by hearing people. Ashipala et al. (1994) explain the reasons for preparing the dictionary of Namibian Sign Language (NSL) as follows: "We want people to know that NSL is a real language like Oshiwambo or English. We want Deaf Namibians to be proud of their Deaf culture

and sign language, and we want hearing people to respect our culture and our sign language" (345).

The authors want their languages to be recognized as "full" languages and feel that documenting them in dictionary format is an appropriate way of doing this. Recognition of sign language as a full-fledged language is also stated as a reason for producing the Mali SL dictionary (Pinsonneault 1999, 8). In the Tanzanian SL dictionary, the compilers emphasize that sign language long predates the publication of the dictionary: "Is it really the first dictionary? Yes, it is! Sign Language, though, has been used for many years before this dictionary" (Chama cha Viziwi Tanzania 1993, 3).

In Kenya, the authors see the publication of their (1991) dictionary as a first step for official recognition of Kenyan Sign Language (KSL); they hope it will "encourage the Kenyan Government to finally recognize KSL as a legitimate language of the Deaf" (Mweri 2001, v). It is interesting to note that the dictionary in Uganda was published in 1998, three years *after* sign language was recognized in the Ugandan National Constitution. Other reasons authors give for publishing a dictionary (e.g., in Kenya [1991] and The Gambia) are the development and documentation of the language.

Apart from the goals of legitimizing, documenting, and developing the languages, authors and compilers of dictionaries of African SLs see a need for more effective communication, particularly for those who live and work with deaf persons (e.g., family, friends, teachers, medical personnel, judges, employers), as well as the general public (e.g., in South Africa, Tanzania, Kenya [1991], and Mali). The aim of the Kenyan SL pamphlets (1998) is to popularize KSL and to help beginners learn it.

Target User Group

In many of the dictionaries of African SLs, the authors do not provide any information on the intended user group (e.g., Uganda, Namibia [2005], and Ghana). On the other hand, sometimes the target group is defined so widely that the dictionary is basically aimed at anyone: deaf persons, people living or working with deaf persons, and people interested in learning sign language (e.g., Kenya [1988], Kenya [1991], Mali, and South Africa).

In some dictionaries, the target group is clearly defined, which explains the structure or the content of the dictionary. The Gambian sign language books, for example, are intended for use in literacy classes for deaf people and in sign language teacher-training courses. The author of the Nigerian SL dictionary also has deaf people in mind as his target group as he hopes "to enhance the building of a substantial English language vocabulary" (Odusanya 2000, vi).

The Kenyan SL pamphlets, on the other hand, are intended for use by persons who are starting to learn sign language. The Tanzanian SL and the Ethiopian SL dictionaries, though aimed at a wide audience, are the only dictionaries that also explicitly state that researchers should make use of the volume.

Data Collection and Selection of Entries

Most dictionaries provide little or no information on how and by whom the data were collected. The SASL dictionary and the dictionary of Namibian SL (1991), however, gives detailed information on this. Its authors used videotaped stories and signed discussions that were transcribed and then translated into English as their data. Afterward, the structure of each sign (manual and nonmanual) was analyzed and described.

For the SASL dictionary, eleven deaf representatives discussed every sign with their communities and decided on the appropriate variant. The variations were videorecorded at regular meetings of these representatives. The process of selecting the representatives of the variants and that of selecting signs and choosing the appropriate variation for the dictionary are described in detail.

Many dictionary authors emphasize that they are presenting only a small set of signs and not an exhaustive collection (e.g., Mali), and that the selection of signs is motivated by various factors. For example, the selection of lexemes in the SASL dictionary is motivated mainly by educational issues; the dictionary therefore includes basic vocabulary that is needed in a primary-school context. The Ugandan SL dictionary provides vocabulary that a beginning sign language learner may find necessary.

Several dictionaries (e.g., Tanzania, South Africa, Namibia [2005], and The Gambia) remind the users that a dictionary is not a tool and

is not sufficient for learning a language and also that one needs to communicate with deaf people in order to learn sign language.

Many compilers state that dictionary making is an ongoing task, that more entries are required, and that entries may need to be modified. The authors of the Kenyan SL dictionary state that their publication is "pioneer work" that will "require improvements from time to time" (Mweri 2001, iv).

Languages Used

As table 2 shows, most dictionaries are based on English. Some of these have an index in an African language. In the Namibian SL dictionary (1991), glosses are given in both English and Oshiwambo.

In only four dictionaries, an African language is used as one of the main languages: In the Sotho SL dictionary, all of the texts are in Sotho, while glosses and example sentences are in Sotho (with translations into English). Similarly, in the Tanzanian SL dictionary, glosses and indices are in Swahili (with translations into English), while all of the front matter is in both languages. The Ethiopian SL dictionary also presents the introductory texts in Amharic and English, while glosses and the index are in Amharic and translated into English. In the Mali SL dictionary, all texts and glosses are given in both French and Bambara.

Structure and Content of Dictionaries of African Sign Languages

In this section I discuss the format and size of the dictionaries, their general structure (megastructure), the order of signs (macrostructure), and how each entry is organized (microstructure).

Format and Size

Format, Number of Pages, and Signs per Page. Of the fifteen dictionaries,[14] nine are A4 format; of these, three are A4 oblong format. Six are A5 format; one of these is A5 oblong format.[15]

The number of pages, which ranges from 41 to about 3,000, depends largely on the arrangement of signs on each page. Half of the dictionaries contain 180–250 pages.

Each page has from three to twelve sign illustrations. Some of the dictionaries have sufficient space for each illustration, and the pictures

Table 2. Languages Used in the Dictionaries

		Language(s) used		
Year	Country	Front matter	Sign glosses/translations	Index/indices
1988	Kenya	English	English (with translation into Swahili)	English, Swahili
1990	DR Congo	French	French	French
1991 (rev. 2001)	Kenya	English	English (with translation into Swahili)	Swahili
1991	Namibia	English	English, Oshiwambo	Oshiwambo, English
1991	Lesotho	Sotho	Sotho (with translation into English)	——
1992–1994	South Africa	English	English	English, Afrikaans, Zulu, Sotho (each with translations into the three other languages)
1993	Tanzania	Swahili, English	Swahili (with translation into English)	Swahili (with translation into English)
1998	Kenya	English	English	——
1998 (rev. 1999)	Uganda	English	English	English
1999	Mali	French, Bambara	French, Bambara	French, Bambara
2000	Nigeria	English	English	English
2001–2005	Gambia	English	English	English
n.d. [ca. 2001]	Ghana	English	English	English
2005	Namibia	English	English	English (with translations into Oshindonga and Afrikaans)
2008	Ethiopia	Amharic, English	Amharic, English	Amharic (with translations into English)

are very clear (e.g., The Gambia [six to eight drawings per A4 page] or Namibia [1991; three drawings per A4 page]). Others have very small illustrations that are difficult to discern (e.g., Ghana [nine signs per A5 page] or Namibia [2005; twelve signs per A4 page]). The Ethiopian SL dictionary presents a sign with one to three photographs, depending on its movement. The SASL dictionary presents only one lexeme per page, but each one may have up to twelve variants, each with an illustration.

Table 3. Format, Number of Pages and Signs Per Page

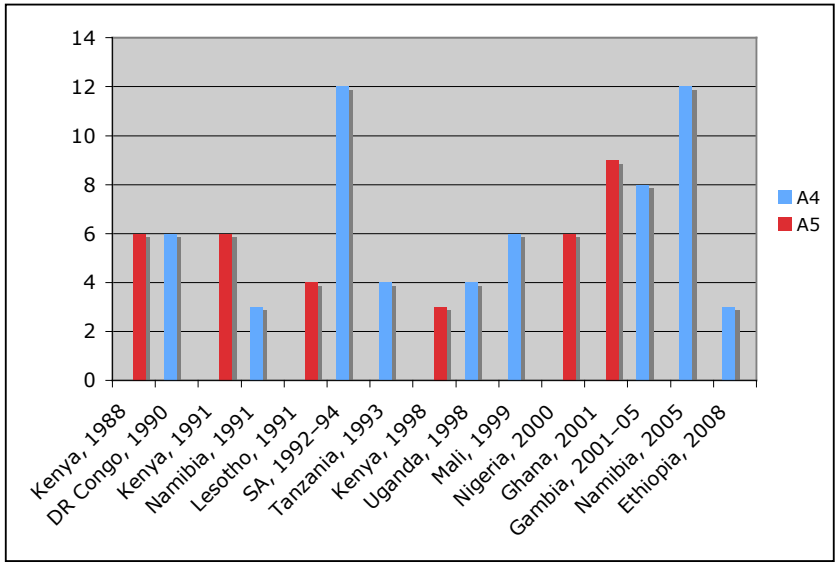
Year	Country	Format	Number of pages	Sign illustrations per page
1988	Kenya	A5 (slightly larger)	128	6
1990	DR Congo	A4	243	6
1991 (rev. 2001)	Kenya	A5 oblong	580	6
1991	Namibia	A4	xxxiv; 254	3
1991	Lesotho	A5	85	4
1992–1994	South Africa	A4 (slightly larger)	3,125 (each vol. 500–700 pp.)	1–12[4]
1993	Tanzania	A4	259	4
1998	Kenya	A5	41 (each pamphlet 11–19 pp.)	3
1998 (rev. 1999)	Uganda	A4	181	4
1999	Mali	A4 oblong	216	6
2000	Nigeria	A5	212	6
2001–2005	Gambia	A4 oblong	187 (each book 3–54 pp.)	Books 1–2: 6 Books 3–4: 8
n.d. [ca. 2001]	Ghana	A5	116	9
2005	Namibia	A4	80	12
2008	Ethiopia	A4	lv, 464	3–7

4. One lexeme per page with maximally twelve different variants; i.e. there may be up to twelve sign illustrations on a page.

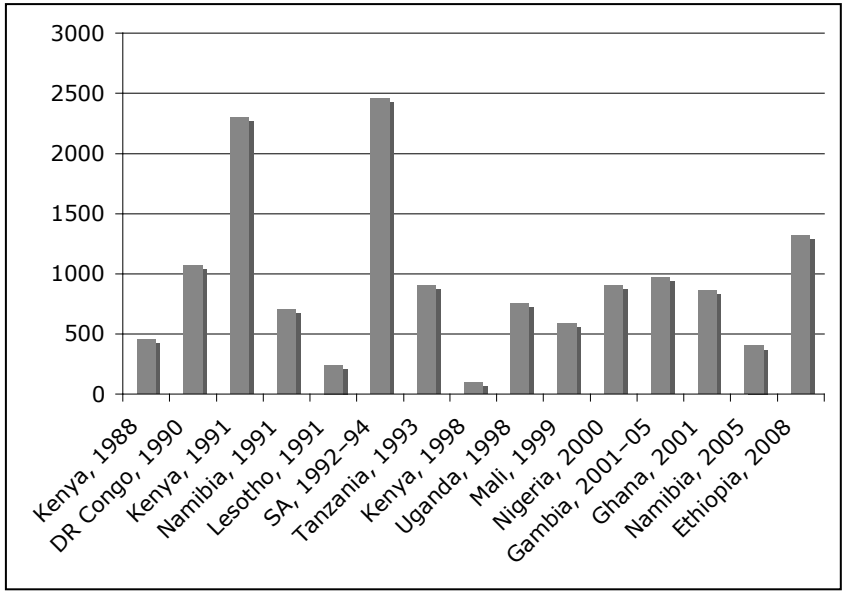
In some dictionaries (e.g., Namibia [1991], Kenya [1998], Tanzania, and Uganda), half of the space on the page is reserved for explanations of sign performance, usage, and/or etymology.

Number of Entries. The number of signs in each dictionary varies greatly. Whereas the three Kenyan SL pamphlets contain 94 entries altogether and the Sotho SL dictionary 240 entries, the Kenyan SL dictionary (1991) and the five volumes of the SASL dictionary comprise approximately 2,300 and 2,400 entries, respectively. Quite a few dictionaries have between 700 and 1,050 entries (e.g., Uganda, Ghana, Tanzania, and Congo).

Graph 1. Sign illustrations per page



Graph 2. Number of entries



General Structure (Megastructure)

The megastructure, which is "the totality of the component parts of a reference work" (Hartmann and James 1998, 93), includes, in addition to the macrostructure, all front and back matter (i.e., introductions, a user guide, abbreviations, indices, bibliographies, and appendices).

All dictionaries of African SLs comprise more than just the macrostructure. All have some kind of introduction, even if brief; many include some user guidance; and almost all have at least one index. The Nigerian SL dictionary also includes some exercises at the end: A handshape is depicted, and the user is asked to identify the sign.

The Mali SL dictionary offers a special feature: Page numbers are depicted with drawings of the hands with the signed numbers.

Introduction, User Guide, General Information. Most introductions are rather brief and comprise mainly a summary of sign language structure and the deaf community. Some longer introductions include a variety of information such as explanations of data collection and/or sign elicitation and sometimes also the choice of informants. Examples include the dictionaries in Namibia (1991), South Africa, and Mali.

Most dictionaries have some kind of user guide. This may include information on the structure of sign languages—often not an introduction to the particular sign language but to sign language structure in general—or explanations of the difference in structure between "real" sign language and other manually based forms of communication (e.g., Kenya [1988], Kenya [1991], Congo, Namibia [1991], Lesotho, South Africa, Mali, and Nigeria).

Indices. Except for the Sotho SL dictionary and the Kenyan SL vocabulary pamphlets, all of the dictionaries contain one or more indices in alphabetical order.

Eight dictionaries contain one index: In Uganda, Nigeria, Ghana and The Gambia, the index is in English. The index in the Namibian SL dictionary (2005) is also in English but has translations into Oshindonga and Afrikaans. The Congolese SL dictionary has an index in French. Two dictionaries have a Swahili index: the Kenyan (1991) and the Tanzanian SL dictionaries.

TABLE 4. General Structure

Year	Country	General structure
1988	Kenya	• ToC • Foreword; Acknowledgements; Preface; Introduction (each 1 p.) • Deafness, SL (5 pp.); Sign Supported Speech (2 pp.) • User guidance • Vocabulary part • Numbers; Manual alphabet • Indices • 12 empty pages for notes • User guidance cont'd: Arrow explanation (1 p.)
1990	DR Congo	• SL; Zaire signs vs. imported ASL signs; SL vs. Sign Supported Speech; Purpose of dictionary (4 pp.) • Vocabulary part • Index • ToC
1991 (rev. 2001)	Kenya	• Several prefaces (each 1-2 pp.); Acknowledgements (1 p.) • SL, KSL, Deaf people (3 pp.) • SL-phonology and -syntax (with photographs and illustrations) (8 pp.) • Vocabulary part • Manual alphabet; Numbers; Days of the week • Index
1991	Namibia	• Project team • ToC • Acknowledgments; Map; Foreword • Personal background of team members (6 pp.); Purpose of dictionary (2 pp.) • Drawings for sign elicitation (7 pp.) • Dictionary structure (9 pp.) • NSL handshapes • User manual (2 pp.) • Numbers; Manual alphabet • Vocabulary part • Indices
1991	Lesotho	• ToC • Introduction SL (in Sotho) (7 pp.) • Manual alphabet; Pronouns; Numbers 1–10; Days of the week; Months; Question pronouns (each 1 p.); Animals (2 pp.) • Vocabulary part (61 pp.) • Phrases (1 p.) • Alphabet for articulation training • Page for notes
1992–1994	South Africa	• Introduction: Data collection and informants; Dictionary structure; Semantic fields; Handshape table; Parameters of signs; Symbol explanation; User guidance (20 pp.) • Glossary: Linguistic terminology (3 pp.) • Afrikaans introduction: User guidance for Afrikaans-speakers • Vocabulary part • Appendices: SL and the deaf community; History of SL in South Africa and regional distribution; SL continuum; Manual alphabets (ASL, BSL, ISL) (13 pp.) • Bibliography (2 pp.) • Indices • Handshape table as bookmark
1993	Tanzania	• Preface (incl. data collection); Acknowledgements; History of CHAVITA; Symbol explanation (each 1 p.) (all in Swahili and English) • ToC (in Swahili and English) • Vocabulary part • International manual alphabet • Index

TABLE 4. *continued*

Year	Country	General structure
1998	Kenya	• Project team; ToC; Introduction (each 1 p.) • Manual alphabet; Arrow explanation (together 1 p.) • Vocabulary part
1998 (rev. 1999)	Uganda	• Acknowledgements (1 p.) • ToC • User guidance and symbol explanation (each 1 p.) • Manual alphabet; Numbers • Vocabulary part • Index
1999	Mali	• Acknowledgements (in Bambara and French) (1 1/2 pp.) • ToC • Information on the author (1 p.) • Introduction: SL structure in general and in Mali; Dictionary structure; Sign selection; Purpose of dictionary (all texts in Bambara and French) (11 pp.) • User guidance: Parameters, Types of movements, Arrow symbols explanations (all texts in Bambara and French) (10 pp.) • Vocabulary part • Indices
2000	Nigeria	• Dedication and foreword (each 1 p.) • Preamble and acknowledgments (2 pp.) • History of SL in Nigeria (8 pp.) • Manual alphabet; numbers • Vocabulary part • Manual alphabet • Exercises (11 pp.) • Bibliography (2 pp.) • Index
2001–2005	Gambia	• Preface and introduction: History of Gambian SL (each 1 p.) • Vocabulary part • Book 1: Manual alphabet; Numbers • Book 4: two picture stories • Index
n.d. [ca. 2001]	Ghana	• Introduction (2 pp.); Acknowledgments (1 p.) • ToC • User guidance and arrow explanation (2 pp.) • Table of handshapes • Manual alphabet; Numbers; Fractions • Vocabulary part • Idiomatic expressions • Index
2005	Namibia	• Introduction: Namibian SL and user guidance (1 p.); Acknowledgments (1 p.) • Manual alphabet; Numbers • Vocabulary part • Index
2008	Ethiopia	• ToC • Acknowledgments • Preface; message from the E.F.R.D. president; foreword; Ethiopian Sign Language (all texts in Amharic and English) (9 pp.) • Introduction: how to use the dictionary; source of signs; the noun ending sign/marker; the photographing of sign pictures; how can signs be understood; arrows (all texts in Amharic and English) (7 pp.) • Manual alphabets: Ethiopian finger spelling; ASL • Numbers • Dictionary preparation team (only in English) • Vocabulary part • Index

Table 5. Indices

Year	Country	Index/indices
1988	Kenya	2 indices: English and Swahili
1990	DR Congo	1 index: French
1991 (rev. 2001)	Kenya	1 index: Swahili
1991	Namibia	2 indices: Oshiwambo and English
1991	Lesotho	——
1992–1994	South Africa	4 indices: English, Afrikaans, Zulu, Sotho (each with translations into the three other languages) Vol. 5: Index of all signs in all volumes
1993	Tanzania	1 index: Swahili (with translations into English)
1998	Kenya	——
1998 (rev. 1999)	Uganda	1 index: English
1999	Mali	2 indices: French and Bambara
2000	Nigeria	1 index: English
2001–2005	Gambia	1 index: English Books 3 and 4: Index contains all signs of the previous books
n.d. [ca. 2001]	Ghana	2 indices: English (separate index for idiomatic expressions)
2005	Namibia	1 index: English (with translations into Oshindonga and Afrikaans)
2008	Ethiopia	1 index: Amharic (with translations into English)

In three dictionaries, the authors have included two indices, one in the "colonial" language, the second in one of the African majority languages of the country: Kenya (1988), Namibia (1991), and Mali. The SASL dictionary contains four indices: English, Afrikaans, Zulu, Sotho, each with translations into the other three languages. The last volume has an index of all of the signs in all volumes.

The index of the Ghanaian SL dictionary has two parts: one for single words, one for idiomatic expressions.

Macrostructure

Macrostructure, defined as "the ordered set of all lemmata (headwords)" (Hausmann and Wiegand 1989, 328), is the basis for arranging words in the dictionary: In spoken languages, this is typically in word-initial sequence (e.g., alphabetically) or in a systematic sequence (e.g., thematically); in sign languages, entries may also be arranged

Table 6. Order of Entries (Macrostructure)

Year	Country	Order of entries		
		thematic	alphabetical	handshapes
1988	Kenya	20 thematic fields		
1990	DR Congo	19 thematic fields		
1991 (rev. 2001)	Kenya		English	
1991	Namibia			handshapes
1991	Lesotho		Sotho	
1992–1994	South Africa		English (each volume: A–Z)	
1993	Tanzania	27 thematic fields		
1998	Kenya	3 thematic fields (1 per pamphlet)		
1998 (rev. 1999)	Uganda	22 thematic fields		
1999	Mali	13 thematic fields within each thematic field: French		
2000	Nigeria		English	
2001–2005	Gambia	ca. 28 thematic fields[5]		
n.d. [ca. 2001]	Ghana	16 thematic fields		
2005	Namibia	18 thematic fields		
2008	Ethiopia	24 thematic fields		

5. As these are designed for literacy classes for Deaf people, some thematic fields appear in one sign book and are used again in another with additional signs. If one counted the thematic fields in each sign book separately, there would be 46.

according to some sign linguistic feature (see also the earlier section on writing sign languages).

Only one dictionary is arranged according to sign language linguistic criteria: The Namibian SL dictionary (1991) contains forty different handshapes, and within each handshape section, the signs are grouped according to meaning. Signs that involve a handshape change are arranged at the end of each section according to the initial handshape. Signs are grouped into different classes, namely "simple" signs (signs that never change) or "complex" signs (signs that appear in different forms depending on the meaning). The authors define three classes of complex signs, which they label as "indicating verbs," "locative verbs," and "classifier verbs."

Four dictionaries are ordered alphabetically: Kenya (1991), South Africa, Lesotho, and Nigeria. The authors give no reasons for choosing this order, but it is probably the "easiest" arrangement for a large corpus of signs. Thematic order in larger corpora may cause problems because some signs may be difficult to classify, the categories may not always be clear or may overlap, and some signs would need to appear in several thematic areas.

Most dictionaries of African SLs are arranged in thematic groups. Such dictionaries have been published in Tanzania, Uganda, Mali, Kenya (1988), Congo, The Gambia, Ghana, and Namibia (2005).

Thematic groups are classes of topics, which may include food and drink; countries (or places); animals (in the Tanzanian SL dictionary these are further divided into four separate groups); family and relationships; times (sometimes months, weekdays, etc., are listed separately, as in book 1 of the Gambian SL and in the Tanzanian SL dictionary); medicine and health; nature; religion; and colors. The reasons for these thematic groups are neither obvious nor stated, and the order of the groups is neither visible nor explained. Signs that do not fit into any of the groups or that could be placed in several of the thematic fields are grouped in categories such as "general signs" in the Ethiopian SL dictionary (mostly signs that are translated as verbs in the spoken language), "other expressions" in the Tanzanian SL dictionary, "miscellaneous nouns" and "prepositions and other useful words" (prepositions, conjunctions, signs for greeting, etc.) in the Ugandan SL dictionary; or "divers" in the Congo SL dictionary. In many dictionaries the handshapes and/or the manual alphabet are listed separately; often, numbers, days of the week, and months are also in separate sections.

In several dictionaries some of the groups are not based on themes but on grammatical function (e.g., "nouns," "verbs," "adjectives and adverbs" in the Tanzanian SL dictionary and in a similar way in the Ugandan SL dictionary, and "quelques verbes" and "adjectifs, adverbes" in the Congo SL and similarly in the Mali SL dictionary).

Several factors explain the prevalence of thematic order in these dictionaries. The authors of the Kenyan (1991) dictionary state that, for a specific topic, only a limited vocabulary can be used immediately and that signs within a thematic field share many features that make

it easier to remember them. Similar reasons for choosing this order could be given for dictionaries that target sign language beginners.

In The Gambia, thematic order is used because these books are conceptualized as literacy materials: The arrangement of topics reflects their importance to people in daily conversations and everyday life. Sign Book 1 begins with a section called "Greeting & Meeting" and continues with "Questions," "Family," "Me, You, and Others," and "Weather." The following sections consist of thematic areas related to time and place. Another important reason for thematic order is that many people (both deaf and hearing) are not accustomed to using a dictionary. For these people, this is often the most convenient arrangement.

The Ghanaian SL dictionary includes an interesting thematic field with so-called idiomatic expressions (seven pages): These are signs that cannot be glossed or translated by a single word in the spoken language (e.g., "I told you so," "Enough of it, I am not interested," "I am sick of you," "explode news, dropping bombshell"), as well as pluralized verb forms like "tell you frequently" or "leave one by one." It would be difficult to find an appropriate place for these signs in an alphabetically arranged dictionary.

Microstructure

Microstructure is the arrangement of information within one entry in a reference work (Hausmann and Wiegand 1989, 344). In most dictionaries of African SLs, an entry consists of a sign illustration and at least one sign translation. This arrangement reflects the purpose and the intended target group. As many of the potential users of these sign language dictionaries have little knowledge of the written language, they will not be able to read longer texts. Moreover, the compilers themselves often have limited written-language skills.

Few dictionaries contain additional explanations of the illustrations. These short descriptions of how to perform a sign, regional variation, and/or etymology are in the written form of one or more spoken language(s). The Namibian SL dictionary (1991) also gives some structural information on each sign (mentioned earlier). The Tanzanian SL dictionary provides drawings of some concrete objects (animals, foods).

Table 7. Sign Illustrations

Year	Country	Sign illustrations	Comments
1988	Kenya	drawings	sometimes only head or hands; sometimes body without head
1990	DR Congo	drawings	almost all 'neutral' facial expression
1991 (rev. 2001)	Kenya	photographs	with arrows for movements; rather small and not very clear
1991	Namibia	drawings	
1991	Lesotho	drawings	sometimes only head or hands; sometimes body without head
1992–1994	South Africa	photographs	with arrows for movements; rather small and not very clear
1993	Tanzania	drawings	for some concrete objects (animals, food stuff) drawings of the objects; sometimes enlargement of handshapes
1998	Kenya	drawings	drawings not very clear
1998 (rev. 1999)	Uganda	drawings	sometimes only hands; almost all 'neutral' facial expression
1999	Mali	drawings	
2000	Nigeria	drawings	sometimes chest and head, sometimes only arms or hands
2001–2005	Gambia	drawings	
n.d. [ca. 2001]	Ghana	drawings	mostly only head, or only hands, or head and hands; drawings not very clear
2005	Namibia	drawings	sometimes only hands; very small drawings, not very clear
2008	Ethiopia	photographs	with arrows for movements

Sign Illustrations. Most dictionaries of African SLs illustrate the signs; only two dictionaries use photographs. These photographs are often of poor quality, which makes it difficult to understand how a sign should be performed. The photographs in the Kenyan SL dictionary are rather small and dark. Those in the SASL dictionary are often not clear and without sufficient contrast as different skin colors need different background colors, for example. In all dictionaries with photographs, arrows indicate the movements in the signs. In the Ethiopian SL dictionary, in signs with movement, two or three photographs are presented for a single sign.

However, sometimes drawings are also not easy to understand. In some sign language dictionaries, only the head or the hands or both the head and the hands are illustrated (e.g., the Kenyan [1988]

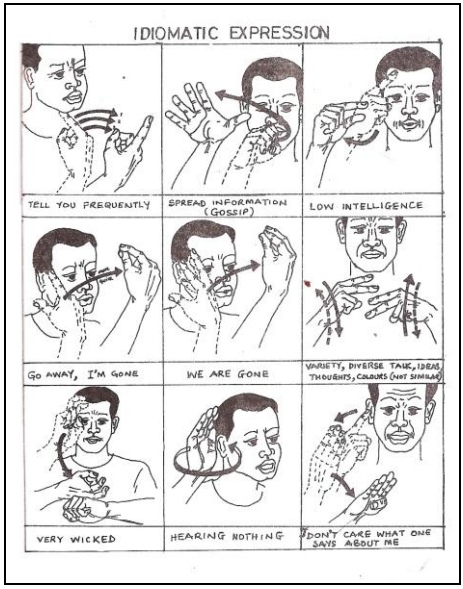


Illustration 1. Ghanaian SL dict., p. 94

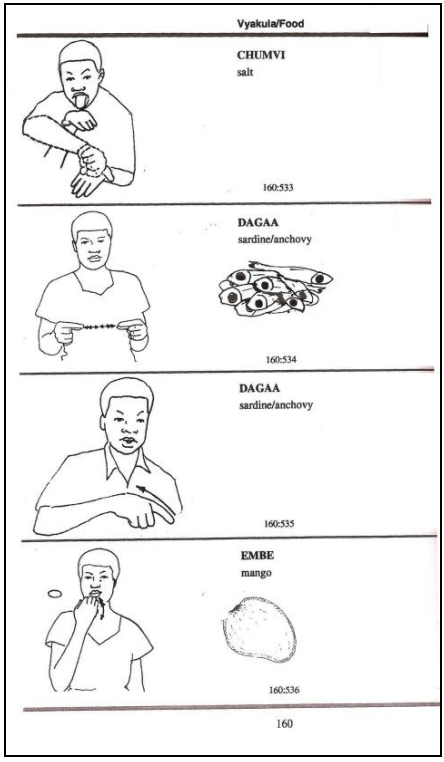


Illustration 2. Tanzania SL dict., p. 160

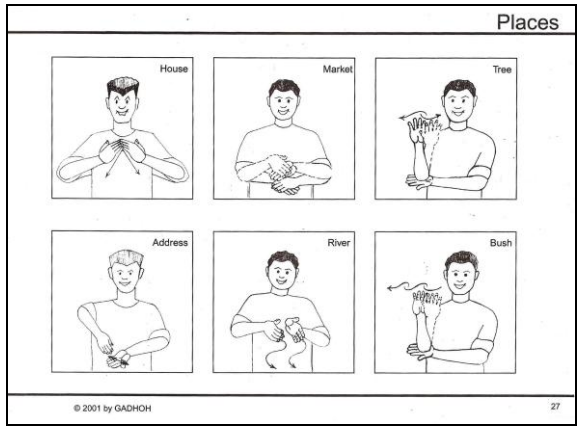


Illustration 3. The Gambia SL dict., p. 27

dictionary and the Namibian SL dictionary [2005]). Often the actual accompanying facial expression is not depicted, but instead the same neutral facial expression is used in every drawing (e.g., in the Congo SL dictionary).

Glosses and Sign Translations. When producing sign language dictionaries in Africa, the problem of multilingualism has been solved in the following way: Signs are translated into or glossed in the "colonial"

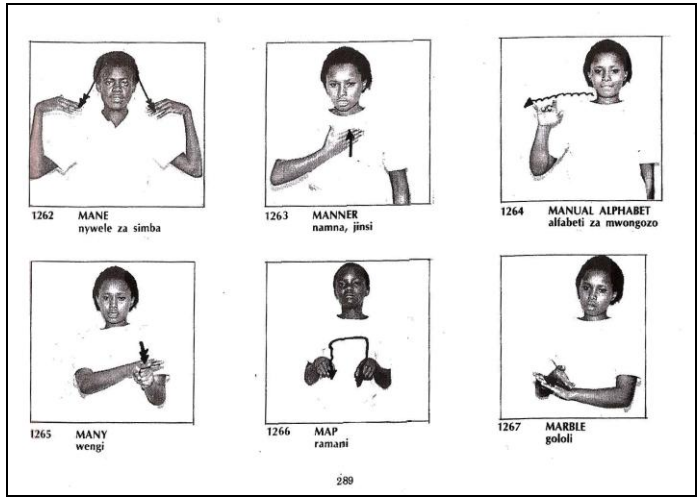


Illustration 4. Kenyan SL dict. (1991), p. 289

Illustration 5. Namibian SL dict. (2005), p. 27

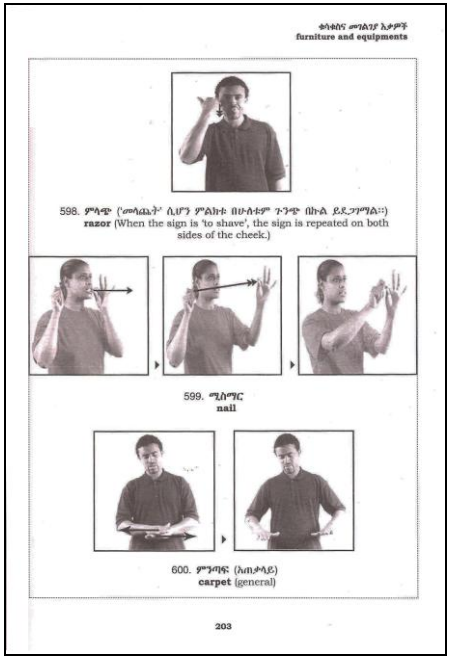


Illustration 6. Ethiopian SL dict., p. 203

Table 8. Language(s) Used for Sign Translations/Glosses

Year	Country	Language(s) used for sign glosses / translations
1988	Kenya	English (with translation into Swahili)
1990	DR Congo	French
1991 (rev. 2001)	Kenya	English (with translation into Swahili)
1991	Namibia	English, Oshiwambo
1991	Lesotho	Sotho (with translation into English); example sentence in Sotho in which the word (sign) is used (with translation into English)
1992–1994	South Africa	English (with translations into Afrikaans, Zulu, Sotho)
1993	Tanzania	Swahili (with translation into English)
1998	Kenya	English
1998 (rev. 1999)	Uganda	English
1999	Mali	French, Bambara
2000	Nigeria	English
2001–2005	Gambia	English
n.d. [ca. 2001]	Ghana	English
2005	Namibia	English
2008	Ethiopia	Amharic (with translation into English)

language, which is often the official language of a country. In most of the dictionaries of African SLs published to date, this is English. Thus, there is no need to decide which language should be used for the translations or glosses.[16] A few dictionaries also use at least one African language: Oshiwambo (Namibia 1991); Swahili (Kenya 1988, 1991; Tanzania); Zulu, Sotho, and Afrikaans (South Africa); Bambara (Mali); and Amharic (Ethiopia). In the Congo SL dictionary, some English glosses/translations are accompanied by translations into Lingala for further specification or clarification of the English word.

The Namibian SL dictionary (1991) differs from the others in that it does not use glosses or translations for each sign but instead provides the meaning in Oshiwambo and English.

In the Sotho SL dictionary, for each entry an example sentence is given in Sotho in which the word (sign) is used, with translations into English.

None of these publications use a notation or transcription system.

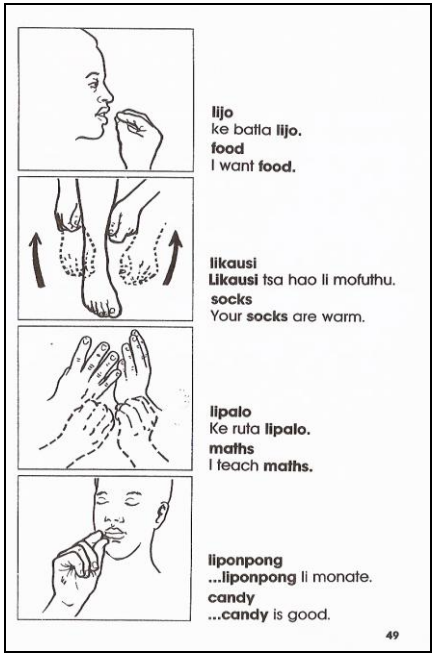


Illustration 7. Sesotho SL dict., p. 49

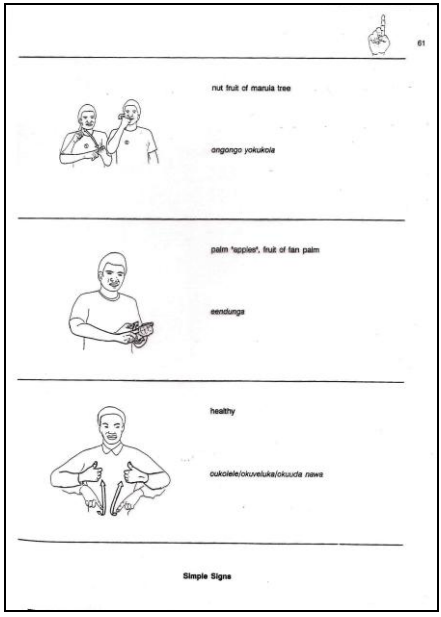
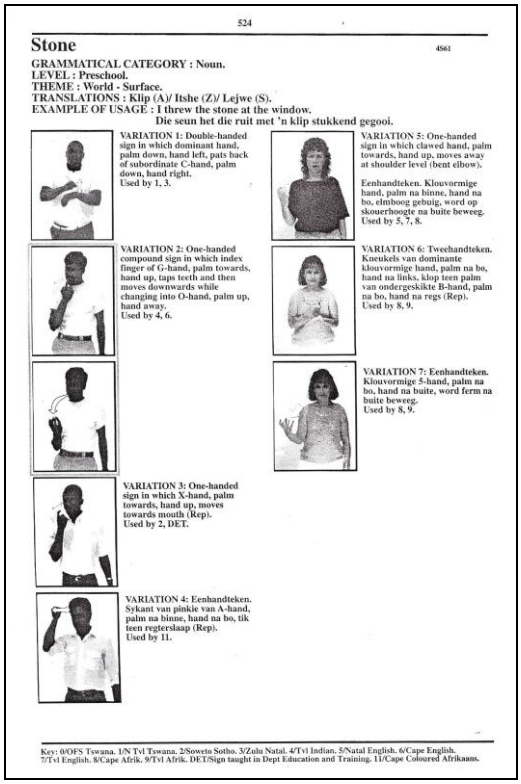


Illustration 8. Namibian SL dict. (1991), p. 61

TABLE 9. Information on Sign Performance, Etymology, and Variation

Year	Country	Information on sign performance and etymology	Variation
1988	Kenya	—	KSL signs from Nairobi (but informants originally from different parts of Kenya)
1990	DR Congo	—	Mainly signs from the Complexe Scolaire Ndwana Nidinga (deaf school in Beno in the region Bandundu); some signs marked as loan signs from ASL
1991 (rev. 2001)	Kenya	—	—
1991	Namibia	—	—
1991	Lesotho		—
1992–1994	South Africa	Explanations on sign performance (in English); Grammatical category (V, N, PN, Adj, Adv); Level (preschool, school); Theme (semantic field); Example sentence (in English and Afrikaans)	Notes on which group uses which variant
1993	Tanzania	—	Classification of each sign as standard sign or regional variant
1998	Kenya	Explanations on sign performance	—
1998 (rev. 1999)	Uganda	Explanations on sign performance; some etymological explanations	—
1999	Mali	Sometimes explanations on etymology and cultural issues at the end of each section	Signs from the Bamako region; notes on loan signs from ASL or LSF
2000	Nigeria	—	—
2001–2005	Gambia	—	—
n.d. [ca. 2001]	Ghana	—	—
2005	Namibia	—	—
2008	Ethiopia	Some explanations on variation in sign performance	—



524

Stone 4561

GRAMMATICAL CATEGORY : Noun.
LEVEL : Preschool.
THEME : World - Surface.
TRANSLATIONS : Klip (A)/ Itshe (Z)/ Lejwe (S).
EXAMPLE OF USAGE : I threw the stone at the window.
Die seun het die ruit met 'n klip stukkend gegooi.

VARIATION 1: Double-handed sign in which dominant hand, palm down, hand left, pats back of subordinate C-hand, palm down, hand right.
Used by 1, 3.

VARIATION 2: One-handed compound sign in which index finger of G-hand, palm towards, hand up, taps teeth and then moves downwards while changing into O-hand, palm up, hand away.
Used by 4, 6.

VARIATION 3: One-handed sign in which X-hand, palm towards, hand up, moves towards mouth (Rep).
Used by 2, DET.

VARIATION 4: Eenhandteken. Sykant van pinkie van A-hand, palm na binne, hand na bo, tik teen regterslaap (Rep).
Used by 11.

VARIATION 5: One-handed sign in which clawed hand, palm towards, hand up, moves away at shoulder level (bent elbow).

Eenhandteken. Klouvormige hand, palm na binne, hand na bo, elmboog gebuig, word op skouerhoogte na buite beweeg.
Used by 5, 7, 8.

VARIATION 6: Tweehandteken. Kneukels van dominante klouvormige hand, palm na bo, hand na links, klop teen palm van ondergeskikte B-hand, palm na bo, hand na regs (Rep).
Used by 8, 9.

VARIATION 7: Eenhandteken. Klouvormige 5-hand, palm na bo, hand na buite, word ferm na buite beweeg.
Used by 8, 9.

Key: 0/OFS Tswana. 1/N Tvl Tswana. 2/Soweto Sotho. 3/Zulu Natal. 4/Tvl Indian. 5/Natal English. 6/Cape English. 7/Tvl English. 8/Cape Afrik. 9/Tvl Afrik. DET/Sign taught in Dept Education and Training. 11/Cape Coloured Afrikaans.

Illustration 9. SASL dict., p. 524

Information on Sign Performance and Etymology. The dictionaries offer little information on how to perform a sign. Only three dictionaries contain this kind of information: the SASL dictionary, the Ugandan SL dictionary, and the Kenyan SL pamphlets (1998). The latter explains the performance of compound signs by describing each part of the compound, whereas the signs are depicted in a single drawing.

The SASL dictionary differs from all the others in also presenting information on the grammatical category of each sign/word, on the stage at which this sign would be learned and used, and on the semantic field. Each sign has an example sentence. Example sentences are also given in the Sotho SL dictionary.

Two dictionaries (Mali, Uganda) explain the etymology of a few signs.

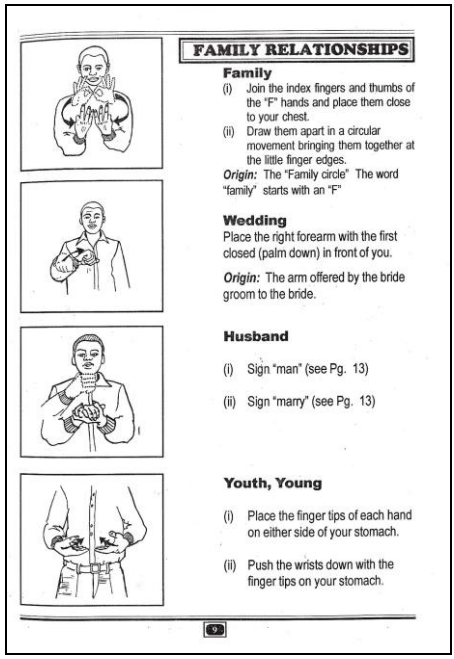


Illustration 10. Ugandan SL dict., p. 9

Variation. In most dictionaries, the compilers do not explain how the data were collected and elicited and how they decided which variant to depict in the dictionary. Only a few dictionaries have notes on where the signs are from and who uses them. Ashipala et al. (1994, 345) state that they "decided which sign was used by most people and which signs were accepted as variants by most people." The compilers of the Namibian SL dictionary (1991) explain that the different productions of one sign were discussed and that the most common variant was chosen for the dictionary (xv).

Some dictionaries mention variation and present one or several variants of a sign (e.g., Tanzania, Congo, and Mali). An exception is, of course, the dictionary of SASL, whose aim is to portray sign variants from around the country. Each entry comprises maximally twelve variants of a single sign.

Most dictionaries were compiled in the capital, mostly by deaf people working with or otherwise associated with the deaf association. The signs in the dictionaries are those used in the capital and within the deaf associations (e.g., Tanzania, Kenya, and Uganda). The

TABLE 10. Dictionaries of African SLs on Video and CD-ROM

Country	Year	Type	Title	Author(s)	Target user group
Namibia	2004	video	Namibian signs: Sign language instruction video for families of hearing impaired children	CLaSH	Families with deaf children and people living and working with deaf people
Kenya	2004	CD-ROM	Kenyan Sign Language interactive	KNAD / KSLRP	Sign language learners

experience of several sign language dictionary projects in Africa is that a collection of signs only from the capital and its surroundings may be problematic because the sign language presented and declared as the "standard" form is often heavily influenced by foreign sign languages. Moreover, the literacy rate of the signers involved is significantly higher than in other regions. Often, the signs used by this group of people differ from those used by the wider deaf community outside the capital. In fact, people in rural areas who have no (or only sporadic) contact with the deaf association, who have not been to a deaf school, and who therefore have had no opportunity to learn the urban variety will use a completely different set of signs.[17] As a result, signs for local foods and other cultural vocabulary are missing or are presented as fingerspelled or initialized signs (e.g., in the Nigerian SL dictionary).[18]

Dictionaries of African SLs on Video and CD-ROM

The Namibian SL video was produced by CLaSH, the Association for Children with Language, Speech, and Hearing Impairments of Namibia. It was not conceptualized as a dictionary but as a sign language instruction video. It is aimed at parents, family members and caregivers of deaf children, teachers and dormitory staff at schools for the deaf, colleagues of deaf people, as well as people interested in learning sign language. It runs for approximately eighty-five minutes. The video consists of nine stages, each of which consists of forty-five words/signs and runs for approximately ten minutes. A word is presented in writing (in English), and the sign is then shown by a deaf signer.

The Kenyan SL CD-ROM was coproduced by the Kenyan National Association of the Deaf and the Kenyan SL Research Project. It is intended for use by sign language learners but also contains elements that could be used by deaf children learning English through sign language. All of the texts are in written English.

The CD-ROM comprises eight parts:

- KSL What you need to know
- KSL dictionary
- KSL alphabet

- KSL numbers
- KSL map of Kenya
- KSL shamba [farm]
- KSL classroom
- KSL duka [shop]

In the introduction ("What you need to know") the user can obtain information on Kenyan Sign Language ("Truth about KSL"), which includes information about fingerspelling, variation, and the influence of other sign languages and artificial sign systems, and other topics. It also discusses the grammatical structure of KSL and presents some sample phrases on video. Finally, one can read about the deaf community.

The dictionary component comprises approximately one thousand entries. The vocabulary is listed alphabetically, but users can also type in the word/sign themselves. The video can be played at three different speeds. Also included are a definition for each lexical item, a memory aid, and a reference to related terms.

In the "Alphabet" and "Numbers" chapters the user can click on letters or numbers, and the corresponding handshape is displayed. One can also select the letters/numbers from a pop-up list. In the four other chapters, pictures are shown; the user can click on different parts of the pictures, and the signs are then presented on video. In the "Map of Kenya" chapter, regions, languages, ethnic groups, and cities are either shown on the map or can be chosen from different lists. In the other three parts, the pictures are also animated (these animations seem to be directed at children).

Conclusion

In 1988 the first dictionary of an African sign language was published in Kenya. Since then, more than twenty dictionaries of African SLs have been published, mostly as printed media: five in West Africa (Mali, The Gambia, Nigeria, Ghana), nine in East Africa (Ethiopia, Uganda, Kenya, Tanzania), one in central Africa (Democratic Republic of the Congo), and six in southern Africa (South Africa, Namibia, Lesotho, Zambia). Also available are a video with signs of Namibian SL and a CD-ROM dictionary of Kenyan SL.

In many countries, the sign language dictionaries have been compiled by the national deaf associations, often with financial support from Western European countries. Therefore, these volumes depict the signs used by the members of the deaf associations, mostly deaf people who have received some kind of formal education, who live in the capital, and whose sign language is often influenced by a foreign sign language. An exception is the SASL dictionary that depicts several variants of one sign used by deaf people all over the country and collected by deaf people.

Most of the African sign language dictionaries have not been widely distributed; in fact, many deaf people are not aware that they exist, and they are usually not used by deaf people.[19] Most of these dictionaries were published with the aim of showing that the national sign languages are bona fide languages and should be recognized as such. They are therefore important mostly for social and political reasons. In a few countries (e.g., The Gambia), the dictionaries are used as teaching materials for literacy classes and for SL teacher and interpreter training.

Notes

1. Tola Odusanya is a Nigerian who graduated from Gallaudet University with a Master of Science in the late 1990s. He returned to Nigeria to work at the Federal College of Education, Oyo.

2. See Carmel (1992) for a full list of sign language dictionaries from 1850 until 1990.

3. Two 2003 issues of *Sign Language Studies* (vol. 3, nos. 3 and 4) focus on sign language dictionaries and lexicography.

4. For an overview see Miller (1994) and König and Schmaling (2012).

5. For a complete list of the countries where SignWriting is used see www.signwriting.org/about/who/who.html (retrieved Sept. 14, 2011).

6. It is important to note, however, that many hearing people in Africa are also not (Western) literate.

7. For more information on SASL and its variants see, for example, Aarons and Akach (1998), Penn et al. (1992–1994), and Aarons and Reynolds (2003).

8. "Standard languages are the result of direct and deliberate intervention by society. This intervention, called 'standardisation,' produced a standard language where before there were just . . . non-standard varieties" (Hudson 2001, 32).

9. In spoken languages, there are specialist dictionaries for dialects.

10. If sign drawings or photos are used, it is nevertheless useful to have a video camera for data collection.

11. It would take too much space to list all of them, but most DVDs and CD-ROMs can be found in the Joachim et al.'s international bibliography of sign language. Online dictionaries exist for BSL, AUSLAN, Austrian SL, German SL, and some other SLs.

12. According to Carmel (1992), this book has 206 pages with sign drawings.

13. The full Amharic title of the book can be translated as "Amharic Sign Language for the Deaf, first book." It was published by the Ministry of Education, Mekanissa School of the Deaf, Alpha School for the Deaf, and the Ethiopian National Association of the Deaf in 1978 (Eyasu Tamene, pers. comm.).

14. I am treating the four Gambian SL books as one "dictionary" with four parts, in parallel to the five volumes of the SASL dictionary. I am also treating the three KSL vocabulary pamphlets as one publication.

15. The European A4-sized paper measures 21 by 29.7 cm (8.26 by 11.69 inches) and roughly equals the standard U.S. letter size (8.5 by 11 inches); A5 is half the size of A4, and oblong format is what is known in the United States as landscape.

16. Glosses are labels for signs: They are usually uninflected words that do not represent the full range of meaning of a particular sign in different contexts.

17. Often, representatives of the deaf associations regard the sign language variant they use as superior to the local variants used by noneducated deaf people. I have experienced this attitude with many deaf people in Kenya, Uganda, and Nigeria. In the introduction to the Nigerian SL dictionary, Odusanya (2000) mentions that the dictionary comprises an "amalgamation of borrowed ASL signs" and "those locally 'invented' in Nigeria" (vi).

18. On the problem of the influence of ASL on African sign languages see Schmaling (2001). Van Cleve (2003, 493) even talks about "ASL imperialism."

19. It is important to note, however, that dictionaries in Africa are not widely used, and for many African languages dictionaries do not exist. Even for the most widely spoken and linguistically well-documented languages, such as Hausa and Swahili, the number of published dictionaries and their distribution is limited.

References: General

Aarons, D., and P. A. O. Akach. 1998. South African Sign Language: One Language or Many? A Sociolinguistic Question. *Stellenbosch Papers in Linguistics* 31: 1–28.

Aarons, D., and L. Reynolds. 2003. South African Sign Language: Changing Policies and Practice. In L. Monaghan, C. Schmaling, K. Nakamura, and

G. Turner, eds., *Many Ways to Be Deaf: International Variation in Deaf Communities,* 194–210. Washington, D.C.: Gallaudet University Press.

Ashipala, S. P., D. Profelius, M. N. Haikali, N. Israel, F. T. Linus, H. H. Nilenge, T. F. Haiduwah, and R. N. Hashiyanah. 1994. The Development of a Dictionary of Namibian Sign Language. In C. Erting, R. C. Johnson, D. L. Smith, and B. D. Snider, eds., *The Deaf Way: Perspectives from the International Conference on Deaf Culture*, 342–46. Washington, D.C.: Gallaudet University Press.

Brien, D., and M. Brennan. 1995. Sign Language Dictionaries: Issues and Developments. In H. Bos and T. Schermer, eds., *Sign Language Research 1994: Proceedings of the 4th European Congress on Sign Language Research, Munich, Sept. 1–3, 1994*, 313–38. Hamburg: Signum.

Carmel, S. 1992. A Checklist of Dictionaries of National Sign Languages of Deaf People. *Sign Language Studies* 76: 233–52.

Crystal, D. 1997. *The Cambridge Encyclopedia of Language*, 2nd ed. Cambridge: Cambridge University Press.

Fischer, R. 1996. Historische Gebärdenlexika. *Das Zeichen* 36: 142–57.

Hartmann, R., and G. James, comps. 1998. *Dictionary of Lexicography*. London: Routledge.

Hausmann, F. J., and H. E. Wiegand. 1989. Component Parts and Structures of General Monolingual Dictionaries: A Survey. In F. J. Hausmann, O. Reichmann, H. E. Wiegand, and L. Zgusta, eds., *Wörterbücher: Ein internationales Handbuch zur Lexikographie*, 328–60. Handbücher zur Sprach- und Kommunikationswissenschaft 5.1. Berlin: de Gruyter.

Hudson, R. A. 2001. *Sociolinguistics*, 2nd ed. Cambridge: Cambridge University Press.

Joachim, G., S. Prillwitz, and T. Hanke, comps. International Bibliography of Sign Language. Retrieved December 22, 2010, from http://www.sign-lang.uni-hamburg.de/bibweb/.

Johnston, T. 2003. Language Standardization and Signed Language Dictionaries. *Sign Language Studies* 3(4): 431–68.

———, and A. Schembri. 1999. On Defining Lexeme in a Sign Language. *Sign Language and Linguistics* 2(1): 115–85.

König, S., and C. Schmaling. 2011. Verschriftung von Gebärdensprache. In H. Eichmann and J. Heßmann, eds., *Handbuch deutsche Gebärdensprache,* 359–75. Hamburg: Signum.

Landau, S. I. 2001. *Dictionaries: The Art and Craft of Lexicography*. Cambridge: Cambridge University Press.

Lucas, C., ed. 1989. *The Sociolinguistics of the Deaf Community.* San Diego: Academic.

———. 2003. The Role of Variation in Lexicography. *Sign Language Studies* 3(3): 322–40.

———, and C. Valli. 1989. Language Contact in the American Deaf Community. In C. Lucas, ed., *The Sociolinguistics of the Deaf Community*, 11–40. San Diego: Academic.

Malm, A. 1992. On Sign Language Lexicography. In Finnish Association of the Deaf (FAD), ed., *East African Sign Language Seminar, Debre Zeit, Ethiopia, Aug. 20–26, 1990: Report*, 61–74. Helsinki: FAD.

Miller, Christopher. 1994. A Note on Notation. *Signpost* 7(3): 191–202.

Milroy, J., and L. Milroy. 1999. *Authority in Language: Investigating Standard English*. London: Routledge.

Schmaling, C. 2000. *Maganar hannu: Language of the Hands: A Descriptive Analysis of Hausa Sign Language*. Hamburg: Signum.

———. 2001. ASL in Northern Nigeria: Will Hausa Sign Language Survive? In V. Dively, M. Metzger, S. Taub, and A. M. Baer, eds., *Signed languages: Discoveries from International Research*, 180–93. Washington, D.C.: Gallaudet University Press.

SignWriting. http://www.signwriting.org/ (accessed February 26, 2006).

Stokoe, W. C., D. Casterline, and C. Croneberg. 1965. *A Dictionary of American Sign Language on Linguistic Principles.* Washington, D.C.: Gallaudet College Press. 2nd ed., 1976.

Sutton, V. 1981. *Sign Writing for Everyday Use*. Newport Beach, Calif.: Sutton Movement Writing Press.

Van Cleve, J. V. 2003. Lexicography and the University: Making the Gallaudet Dictionary of American Sign Language. *Sign Language Studies* 3(4): 487–500.

Wrigley, O., M. Suwanarat, A. Ratanasint, V. Rungsrithong, and L. B. Anderson, eds. 1990. *The Thai Sign Language Dictionary*, rev. and exp. ed. Bangkok: National Association of the Deaf in Thailand.

References: Dictionaries of African SLs in Alphabetical Order

Akach, P. A. O., ed. 1991. *Kenyan Sign Language Dictionary*. Nairobi: KNAD.

Bwalya, A. L. 1985. *Zambian Sign Language*. Lusaka, Zambia: Curriculum Development Centre, Ministry of General Education and Culture.

Cassingham, R. n.d. [after 1994]. *Sign Language Basic Vocabulary: Information for Teachers and Parents*. Kampala: Uganda National Institute of Special Education.

Chama cha Viziwi Tanzania [Tanzanian Association of the Deaf]. 1993. *Kamusi ya lugha ya alama Tanzania / The Tanzania Sign Language Dictionary: Kiswahili / Kiingereza—lugha ya alama / Swahili / English—Sign Language*. Dar es Salaam: Advert International.

CLaSH. 2004. *Namibian Signs: Sign Language Instruction Video for Families of Hearing Impaired Children.* Video. CLaSH: Windhoek, Namibia.

Cornett, D. J. 1990. *Communiquons avec les sourds: Dictionnaire bilingue élémentaire: Langue des signes/francais*. Bandundu, Rep. du Zaire: CEEBA.

Ethiopian National Association of the Deaf (ENAD). 2008. *Ethiopian Sign Language Dictionary*. N.p.: ENAD.

Gambian Association of the Deaf and Hard of Hearing (GADHOH). 2001–2005. *Gambian Sign Language: Books 1–4*. Banjul: GADHOH.

Ghana National Association of the Deaf. n.d. [ca. 2001]. *Ghanaian Sign Language*. Ghana: Ghana National Association of the Deaf.

Janes, C. P. 1991. *Puo ea sesotho ka matsaho*. Maseru, Lesotho: Epic Printers.

Kenya National Association of the Deaf (KNAD) and Kenya Sign Language Research Project (KSLRP). 2004. *Kenyan Sign Language Interactive*. CD-ROM.

Kenya Sign Language Research Project. 1998. *Kenyan Sign Language Vocabulary Pamphlets: Time; Animals; Family.* Nairobi: KNAD.

Madison, J. P., ed. 2005. *Namibian Sign Language: A Book for Beginners*. Oshakati, Namibia: [s.n.].

Morgan, R., S. K. Liddell, M. M. N. Haikali, et al. 1991. *Namibian Sign Language to English and Oshiwambo*. Washington, D.C.: Gallaudet University Press.

Mweri, J. G., ed. 2001. *Kenyan Sign Language Dictionary*, 2nd rev. ed. Nairobi: KNAD.

Nieder-Heitmann, N., comp. 1980. *Talking to the Deaf: Praat met die dowes. A Visual Manual of Standardized Signs for the Deaf in South Africa: 'n visuele handboek met gestandaardiseerde gebare vir Dowes in Suid-Afrika*. Pretoria, South Africa: Dept. of Education and Training/S.A. National Council for the Deaf.

Odusanya, T. 2000. *Basic Sign Language*. Ikeja, Lagos: Kunfemodot Services.

Penn, C., D. Ogilvy-Foreman, D. Simmons, and M. Anderson-Forbes. 1992–1994. *Dictionary of Southern African Signs for Communicating with the Deaf.* 5 vols. [s.l.]: Human Sciences Research Council.

Pinsonneault, D. 1999. *Lexique des signes utilisés par les sourds du Mali: Mali mEnnikEbaliw ka taamasiyEnw daNEgafe*. Mali: Centre Internationale d'Étude et de Coopération Internationale.

Rothenborg-Jensen, I.-L., and E. C. C. Yego. 1988. *A Basic Kenyan Sign Dictionary: English/Kiswahili*. Nairobi: Kenya Institute of Special Education.

Schmaling, C. H., and L. Bala Hausawa. 2011. *Maganar hannu: Harshen bebaye na kasar Hausa. Littafi na farko: Iyali*. Kano: Good Image Printing. [Hausa Sign Language, Book 1: Family.]

Uganda National Association of the Deaf. 1998. *Manual of Ugandan Signs*. Kampala: UNAD.

———. 1999. *Manual of Ugandan Signs*, rev. ed. Kampala: UNAD.

ERRATUM

C. H. Schmaling, Dictionaries of African Sign Languages: An Overview. *Sign Language Studies* 12 (2): 236–78.

On page 246 of the cited article, the phrase (c) a collection of Hausa Sign Language signs, each with a translation into Hausa; should read: (c) a collection of Hausa Sign Language signs, each with a translation into Hausa, is only the first in a series, each with its own thematic field.

Sign Language Studies apologizes for any confusion.